Table 2

Changes in employment status among the SEH doctorate holders, by sex, career stage, and visa status: 2015–19

(Number and percent)

Population characteristics	All SEH doctorate holders		Women		Men		Early career		Age 56-65		U.S. citizens and permanent residents		Temporary visa holders	
	Number	Percent	Number	Percent	Number	Percent				Percent	Number	Percent	Number	Percent
Panel population	856,050	100.0	299,300	100.0	556,750	100.0	164,250	100.0	235,000	100.0	598,950	100.0	257,100	100.0
Labor force sta	itus at eac	h survey ı	reference p	oeriod ^a										
Employed in 2015	807,300	94.3	273,950	91.5	533,350	95.8	157,050	95.6	208,300	88.7	561,000	93.7	246,350	95.8
Employed in 2017	792,450	92.6	270,250	90.3	522,200	93.8	157,600	96.0	194,050	82.6	548,400	91.6	244,000	94.9
Employed in 2019	773,600	90.4	264,950	88.5	508,700	91.4	157,750	96.0	177,050	75.4	532,500	88.9	241,100	93.8
Unemployed in 2015	12,800	1.5	5,400	1.8	7,400	1.3	3,700	2.2	3,950	1.7	8,450	1.4	4,300	1.7
Unemployed in 2017	13,700	1.6	5,150	1.7	8,550	1.5	2,850	1.7	5,050	2.2	9,500	1.6	4,200	1.6
Unemployed in 2019	11,250	1.3	3,950	1.3	7,300	1.3	2,250	1.4	3,650	1.6	7,850	1.3	3,400	1.3
Not in labor force in 2015	35,950	4.2	19,900	6.6	16,050	2.9	3,500	2.1	22,750	9.7	29,500	4.9	6,450	2.5
Not in labor force in 2017	49,900	5.8	23,900	8.0	26,000	4.7	3,800	2.3	35,900	15.3	41,050	6.9	8,850	3.4
Not in labor force in 2019	71,200	8.3	30,400	10.2	40,800	7.3	4,250	2.6	54,250	23.1	58,600	9.8	12,600	4.9
Retirement sta	tus at eacl	n survey r	eference p	eriod ^a										
Retired in 2015	21,700	2.5	8,950	3.0	12,800	2.3	200	0.1	20,250	8.6	19,100	3.2	2,650	1.0
Retired in 2017	36,450	4.3	13,150	4.4	23,300	4.2	200	0.1	34,100	14.5	30,900	5.2	5,550	2.2
Retired in 2019	58,300	6.8	20,600	6.9	37,700	6.8	800	0.5	52,000	22.1	48,900	8.2	9,400	3.7
Employment ar	nd residen	cy: 2015-	·19 ^b											
Not in labor force at least once	87,600	10.2	39,550	13.2	48,050	8.6	7,800	4.8	60,200	25.6	69,450	11.6	18,150	7.1
Unemployed at least once	30,400	3.6	12,200	4.1	18,200	3.3	7,450	4.6	9,600	4.1	20,900	3.5	9,500	3.7
Retired at least once	64,500	7.5	22,700	7.6	41,800	7.5	950	0.6	57,100	24.3	53,300	8.9	11,150	4.3
Working part time at least once	123,100	14.4	61,100	20.4	62,000	11.1	18,100	11.0	52,100	22.2	94,050	15.7	29,050	11.3
Employed in 2015, 2017, and 2019	745,402	87.1	251,200	83.9	494,200	88.8	150,000	91.3	169,250	72.0	513,900	85.8	231,500	90.0
Reside in U.S. in 2015–19	730,300	85.3	266,150	88.9	464,150	83.4	138,550	84.4	204,100	86.9	567,700	94.8	162,600	63.3
Reside abroad in 2015–19	101,050	11.8	26,300	8.8	74,800	13.4	18,050	11.0	26,650	11.3	19,350	3.2	81,700	31.8
Employment se	ector chan	ges: 2015	5, 2017, an	d 2019 ^c										
Changed employer sector at least once	143,900	19.3	56,450	22.5	87,450	17.7	40,200	26.8	32,600	19.3	103,600	20.2	40,300	17.4

Table 2

Changes in employment status among the SEH doctorate holders, by sex, career stage, and visa status: 2015–19

(Number and percent)

Population	All SEH doctorate holders		Women		Men		Early career		Age 56-65		U.S. citizens and permanent residents		Temporary visa holders	
characteristics	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Involuntarily out of field at least once	20,100	2.7	6,450	2.6	13,650	2.8	3,350	2.2	4,350	2.6	13,450	2.6	6,650	2.9
Received federal support at least once	265,200	35.6	91,050	36.2	174,150	35.2	61,200	40.8	54,900	32.4	203,500	39.6	61,700	26.7
In non-S&E occupation at least once	189,150	25.4	71,000	28.3	118,150	23.9	28,400	18.9	53,050	31.3	141,550	27.5	47,600	20.6

SEH = science, engineering, and health; S&E = science and engineering.

Note(s):

The early career doctorate holders are those who earned their doctorates between 2009 and 2013. This subgroup remains in the first 10 years after earning their doctorate degree during the survey period 2015–19.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients longitudinal panel 2015–25 (LSDR 2015–19 data file).

^a Labor force and retirement status estimates are for the baseline survey in 2015 and follow-up surveys in 2017 and 2019.

^b Selected characteristic was reported at least one time or at all times in each of the three survey reference periods of 1 February 2015, 2017, or 2019.

^c Change in selected employment characteristic occurred at least once among 745,400 who were employed in all three survey reference periods of 1 February 2015, 2017, and 2019.